

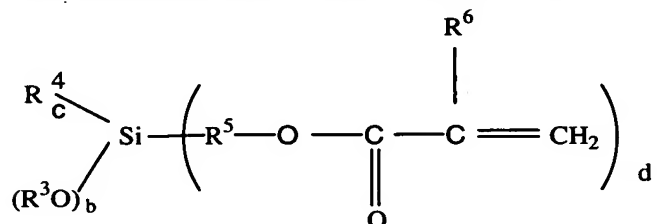
Please amend the Application as follows.

AMENDMENTS TO THE CLAIMS:

The present listing of claims replaces all prior versions, and listings of claims in the application.

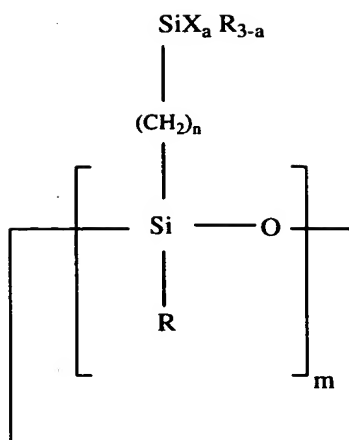
1. (Currently Amended) A multilayered article comprising:

- (1) a substrate (S);
- (2) a scratch-resistant layer (SR) prepared by curing a scratch-resistant coating composition ~~comprising~~ consisting of a polycondensate prepared from at least one ~~silane~~ silicon-containing compound, said polycondensate being prepared by a sol-gel process, wherein said at least one ~~silane~~ silicon containing compound is selected from the group consisting of 1) methylsilane; 2) methyltrimethoxysilane, methyltrihydroxysilane and mixtures thereof; 3) silyl acrylates according to the formula



in which R³ and R⁴ are identical or different monovalent hydrocarbon radicals, R⁵ is a divalent hydrocarbon radical having 2 to 8 carbon atoms, R⁶ denotes hydrogen or a monovalent hydrocarbon radical, the index b is an integer having a value from 1 to 3, the index c is an integer having a value from 0 to 2 and the index d is an integer having a value of (4 - b - c);

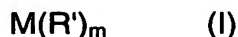
- 4) silylacrylates comprising nanoscale AlO(OH) particles; and
- 5) cyclic organosiloxanes according to the formula



where m = 3 to 6, R = C₁ to C₈-alkyl and/or C₆ to C₁₄-aryl, wherein the m-plurality of n's and R's within the molecule may be identical or different ; and

- (3) a top layer (T) prepared by curing a top layer coating composition prepared by hydrolysing a composition consisting of

- (a) at least one compound represented by general formula I,



wherein M is an element or compound selected from the group consisting of Si, Ti, Zr, Sn, Ce, Al, B, VO³⁺, In and Zn, R' represents a hydrolysable radical, and m is an integer from 2 to 4; and

- (b) optionally at least one compound represented by general formula II,



wherein the radicals R' and R are the same or different, R' is as defined for general formula (I), R represents a group selected from an alkyl group, an alkenyl group, an aryl group, a hydrocarbon group with at least one halogen group, an epoxide group, a glycidyloxy group, an amino group, a mercapto group, a methacryloxy group and a cyano group, and a and b

independently of one another have a value from 1 to 3, provided that the sum of a and b is four and with the proviso that when a compound of formula II is present, it is not a methyltrimethoxysilane or methyltrihydroxysilane; and

- (c) optionally one or more additives selected from the group consisting of water, acid, solvent, dyestuffs, flow control agents, UV stabilizers, IR stabilizers, photoinitiators and photosensitizers,

wherein said scratch-resistant layer is interposed between said substrate and said top layer.

2. (Original) The multilayered article of Claim 1 wherein said substrate comprises a plastic.

3. (Original) The multilayered article of Claim 1 wherein the polycondensate of the scratch-resistant coating composition is prepared from methylsilane.

4. (Original) The multilayered article of Claim 1 wherein the polycondensate of the scratch-resistant coating composition is prepared from a composition comprising 10 to 70 wt.% silica sol, and 30 to 90 wt.% of a partially condensed organoalkoxysilane, in a solvent mixture comprising at least one aqueous solvent and organic solvent.

5. (Original) The multilayered article of Claim 1 wherein the polycondensate of the scratch-resistant coating composition is prepared from at least one silyl acrylate.

6. (Original) The multilayered article of Claim 1 wherein the scratch-resistant coating composition further comprises methacryloxypropyl-trimethoxysilane and AlO(OH) nanoparticles.

7. (Original) The multilayered article of Claim 1 wherein the polycondensate of the scratch-resistant coating composition is prepared from at least one multifunctional cyclic organosiloxane.

8. (Original) The multilayered article of Claim 1 wherein the hydrolysis of the composition of the top layer coating composition is conducted in the presence of at least 0.6 mole of water, based on 1 mole of hydrolysable radicals R'.

9. (Original) The multilayered article of Claim 1 wherein during the hydrolysis of the composition of the top layer coating composition, the compound of formula II is present in an amount of less than 0.7 mole, based on 1 mole of the compound of formula I.

10. (Original) The multilayered article of Claim 1 wherein the hydrolysis of the composition of the top layer coating composition is conducted at a pH of less than 6.0.

11. (Original) The multilayered article of Claim 1 wherein the solids content of the top layer coating composition is 0.2 to 15 wt.%.

12. (Original) The multilayered article of Claim 1 wherein the hydrolysis of the composition of the top layer coating composition is conducted in the presence of a solvent selected from at least one of water, an alcohol having a boiling point below 120°C and an alkoxy-alcohol.

13. (Original) The multilayered article of Claim 1 wherein M of formula (I) is selected from the group consisting of Si, Ti, Zr, Sn and Ce, and m is 4.

14. (Previously presented) The multilayered article of Claim 1 wherein M of formula (I) is selected from the group consisting of Al, B, VO^{3+} and In, and m is 3.

15. (Original) The multilayered article of Claim 1 wherein M of formula (I) is Zn, and m is 2.

16. (Original) The multilayered article of Claim 1 wherein the hydrolysable radical R' of formulas (I) and (II) is selected from the group consisting of halogens, C₁₋₄-alkoxy, C₆₋₁₀-aryloxy, C₁₋₄-acyloxy and alkylcarbonyl.

17. (Original) The multilayered article of Claim 1 wherein formula (I) is selected from at least one tetraalkoxysilane.

18. (Original) The multilayered article of Claim 1 wherein formula (II) is selected from at least one of glycidyloxy-propyl-tri-methoxy-silane, methyltriethoxysilane and methacryloxy-propyl-trimethoxysilane.

19. (Original) The multilayered article of Claim 1 wherein after completion of the hydrolysis of the composition of the top layer coating composition a hydrolysis product is formed and, at least one of:

at least one additive selected from the group consisting of flow control agents, dyestuffs, stabilizers and inorganic fillers is added to the hydrolysis product; and

the concentration of the hydrolysis product is adjusted to 0.02 to 15 wt.% by adding at least one of alcohols and alkoxy-alcohols to the hydrolysis product.

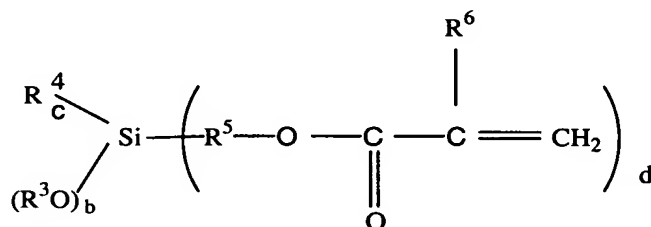
20. (Original) The multilayered article of Claim 1 wherein the scratch-resistant layer has a thickness of 0.5 to 30 μm .

21. (Original) The multilayered article of Claim 1 wherein the top layer has a thickness of 0.1 to 3.0 μm .

22. (Original) The multilayered article of Claim 1 further comprising a primer layer (P) interposed between said substrate and said scratch-resistant layer.

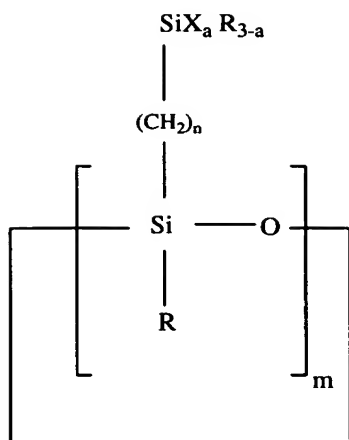
23. (Currently amended) A process of preparing a multilayered article comprising the following steps:

- (a) providing a substrate;
- (b) forming a scratch-resistant layer by applying a scratch-resistant coating composition to a surface of said substrate, and partially curing the applied scratch-resistant coating composition, said scratch-resistant coating composition ~~comprising~~ consisting of a polycondensate prepared from at least one ~~silane~~ silicon-containing compound, said polycondensate being prepared by a sol-gel process wherein said at least one ~~silane~~ silicon-containing compound is selected from the group consisting of 1) methylsilane; 2) methyltrimethoxysilane, methyltrihydroxysilane and mixtures thereof; 3) silyl acrylates according to the formula



in which R³ and R⁴ are identical or different monovalent hydrocarbon radicals, R⁵ is a divalent hydrocarbon radical having 2 to 8 carbon atoms, R⁶ denotes hydrogen or a monovalent hydrocarbon radical, the index b is an integer having a value from 1 to 3, the index c is an integer having a value from 0 to 2 and the index d is an integer having a value of (4 – b – c);

- 4) silylacrylates comprising nanoscale AlO(OH) particles; and
- 5) cyclic organosiloxanes according to the formula



where m = 3 to 6, R = C₁ to C₈-alkyl and/or C₆ to C₁₄-aryl, wherein the m-plurality of n's and R's within the molecule may be identical or different; and

- (c) forming a top layer by applying a top layer coating composition to the scratch-resistant layer, said top layer coating composition being prepared by hydrolysing a composition consisting of
- (i) at least one compound represented by general formula I,



wherein M is an element or compound selected from the group consisting of Si, Ti, Zr, Sn, Ce, Al, B, VO³⁺, In and Zn, R' represents a hydrolysable radical, and m is an integer from 2 to 4; and

- (ii) optionally at least one compound represented by general formula II,



wherein the radicals R' and R are the same or different, R' is as defined for general formula (I), R represents a group selected from an alkyl group, an alkenyl group, an aryl group, a hydrocarbon group with at least one halogen group, an epoxide group, a glycidyloxy group, an amino group, a mercapto group,

a methacryloxy group and a cyano group, and a and b independently of one another have a value from 1 to 3, provided that the sum of a and b is four and

(iii) optionally one or more additives selected from the group consisting of water, acid, solvent, dyestuffs, flow control agents, UV stabilizers, IR stabilizers, photoinitiators and photosensitizers; and

(d) curing said scratch-resistant and top layers
with the proviso that when a compound of formula II is present, it is not a methyltrimethoxysilane or methyltrihydroxysilane.

24. (Previously Presented) The process of Claim 23 further comprising drying the scratch-resistant layer at a temperature of greater than 110°C, after the application of the scratch-resistant coating composition to said substrate.

25. (Original) The process of Claim 24 wherein the scratch-resistant coating composition comprises flow control agents present in an amount of 0.01 to 3.0 wt.%.

26. (Original) The process of Claim 24 wherein the top layer coating composition is applied at a relative humidity of 50 to 75%.

27. (Original) The process of Claim 24 further comprising curing the scratch-resistant layer,
activating the cured scratch-resistant layer by applying at least one of a corona treatment and a flame treatment to a surface of the cured scratch-resistant layer, and

applying said top layer coating to the activated scratch-resistant layer.

28. (Original) The process of Claim 24 further comprising,
applying a primer layer (P) to the substrate, and
applying the scratch-resistant coating composition to the primer layer.